CLAIMS

Amend the claims as follows.

1.   (Currently amended) A method for testing an echo canceller, comprising:

generating a[n] <u>packetized</u> excitation signal including a preamble portion and a test portion, <u>the generating occurring external to the echo canceller</u>;

encoding the preamble portion with configuration information relating to the echo canceller; <u>and</u>

transmitting the excitation signal to the echo canceller <u>through a network</u>; and measuring a combined loss a predetermined time before receiving the test portion.

2.   (Original) The method of claim 1 including taking a performance measurement responsive to the preamble portion.

3   (Canceled)

4.   (Original) The method of claim 1 including encoding instructions in the preamble portion that when executed by the echo canceller result in inhibiting adaptation and clearing a register in the echo canceller.

5.   (Currently amended) A <u>The</u> method <u>of claim 1</u> for testing an echo canceller, comprising:

generating an excitation signal including a preamble portion and a test portion; encoding the preamble portion with configuration information relating to the echo canceller;

transmitting the excitation signal to the echo canceller; and encoding instructions in the preamble portion that when executed by the echo canceller result in disabling a processor in the echo canceller.

6.   (Original) The method of claim 1 including encoding a test identifier in the preamble portion.

7.   (Currently amended) A <u>The</u> method <u>of claim 1</u> for testing an echo canceller, comprising:

~~generating an excitation signal including a preamble portion and a test portion;~~

~~encoding the preamble portion with configuration information relating to the echo canceller;~~

~~transmitting the excitation signal to the echo canceller; and~~

encoding a test signal identifier in the preamble portion.

8.   (Original) The method of claim 1 including encoding the preamble portion in such a way as to be capable of being differentiated from the test portion.

9.   (Currently amended) A method of testing an echo canceller, comprising:

receiving ~~an~~ packetized excitation signal generated externally to the echo canceller, the excitation signal including a preamble portion and a test portion;

decoding the preamble portion after receiving the excitation signal from a network; and

controlling the echo canceller during testing responsive to the decoded preamble portion; ~~and~~

~~measuring a combined loss a predetermined time before receiving the test portion.~~

10.   (Original) The method of claim 9 including:

inhibiting adaptation in the echo canceller responsive to the preamble portion; and

clearing a register in the echo canceller responsive to the preamble portion.

11.   (Currently amended) ~~A~~ The method of claim 9 ~~testing an echo canceller,~~ comprising~~:~~

~~receiving an excitation signal including a preamble portion and a test portion;~~

~~decoding the preamble portion;~~

~~controlling the echo canceller during testing responsive to the decoded preamble portion; and~~

disabling a processor in the echo canceller responsive to the preamble portion.

12.   (Original) The method of claim 9 including identifying a test to be performed on the echo canceller responsive to the preamble portion.

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13.   (Currently amended) A The method of <u>claim 9</u> testing an echo canceller, comprising:

~~receiving an excitation signal including a preamble portion and a test portion;~~

~~decoding the preamble portion;~~

~~controlling the echo canceller during testing responsive to the decoded preamble portion; and~~

identifying a type of test signal responsive to the preamble portion.

14.   (Original) The method of claim 9 including differentiating the preamble portion from the test portion.

15.   (Original) The method of claim 9 including controlling the echo canceller during testing to within a single sample time of the excitation signal.

16.   (Original) The method of claim 15 including controlling the echo canceller during testing to within 125 microseconds.

17.   (Canceled)

18.   (Previously presented) The system of claim 20 including:

tail circuit emulating means for generating an echo back signal responsive to the test portion of the excitation signal; and

recording means for recording any received echo signal allowed to pass through the echo canceller.

19.   (Previously presented) The system of claim 20 wherein the preamble portion sets timing associated with performance tests defined in ITU-T G.165 and G.168 standards.

20.   (Currently amended) A system for testing an echo canceller, comprising:

signal generating means for generating an <u>packetized</u> excitation signal including a preamble portion and a test portion<u>, the signal generating means being external to the echo canceller</u>;

<u>transmitting means for transmitting the excitation signal from the signal generating means to the echo canceller through a network;</u> and

controller means for controlling the echo canceller during testing according to the preamble portion;

wherein the preamble portion identifies a type of test.

21.   (Previously presented) The system of claim 20 wherein the preamble portion identifies a performance test.

22.   (Previously presented) The system of claim 20 wherein the preamble portion is a correlated pulse code modulated sequence capable of being differentiated from the test portion of the excitation signal.

23.   (Currently amended) A system for testing an echo canceller, comprising:

signal receiving means for receiving an ~~a~~ packetized excitation signal transmitted over a network, the excitation signal including a preamble portion and a test portion; and

decoding means for obtaining configuration information by decoding the preamble portion ~~including identifying a test type in the test portion~~.

24.   (Currently amended) ~~A~~ The system of claim 23 ~~for testing an echo canceller, comprising:~~

~~signal receiving means for receiving an excitation signal including a preamble portion and a test portion; and~~

~~decoding means for obtaining configuration information by decoding the preamble portion;~~

wherein the echo canceller includes an H-register and a non-linear processor; and

wherein the configuration information includes any of the following:

   instructions related to the management of the H-register;

   instructions related to the management of the non-linear processor;

   instructions related to an adaptation function in the echo canceller; and

   timing information related to any of the aforementioned instructions.

25.   (Original) The system of claim 23 wherein the decoding means differentiates the preamble portion from the test portion.

26.   (Canceled)

27. (Previously presented) The system of claim 29 including:

a tail circuit emulating for generating an echo back signal responsive to the test portion of the excitation signal; and

a recorder for recording any received echo signal allowed to pass through the echo canceller.

28. (Previously presented) The system of claim 29 wherein the preamble portion sets timing associated with performance tests defined in ITU-T G.165 and G.168 standards.

29. (Currently amended) A system for testing an echo canceller, comprising:

a signal generator for generating an packetized excitation signal external to the echo canceller, the excitation signal including a preamble portion and a test portion;

a transmitter for transmitting the excitation signal from the signal generator to the controller via a network; and

a controller for controlling the echo canceller during testing according to responsive to the preamble portion;

wherein the preamble portion identifies a type of test portion.

30. (Previously presented) The system of claim 29 wherein the preamble portion identifies a performance test.

31. (Currently amended) A The system of claim 29 for testing an echo canceller, comprising:

a signal generator for generating an excitation signal including a preamble portion and a test portion; and

a controller for controlling the echo canceller during testing according to the preamble portion;

wherein the preamble portion is a correlated pulse code modulated sequence capable of being differentiated from the test portion of the excitation signal.

32. (Canceled)

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33.   (Previously presented) The echo canceller of claim 35 wherein the decoder differentiates the preamble portion from the test portion.

34.   (Previously presented) The echo canceller of claim 35
wherein the decoder extracts control information from the preamble portion and wherein the controller controls the echo canceller responsive to the control information.

35.   (Currently amended) An echo canceller, comprising:
a receiver for receiving an <u>packetized</u> excitation signal <u>from a network, the excitation signal being generated external to the echo canceller and</u> including a preamble portion and a test portion; and
a decoder for decoding the preamble portion, the decoded preamble portion configuring the echo canceller during testing;
~~wherein the preamble portion identifies the test portion.~~

36.   (Previously presented) The echo canceller of claim 35 wherein the preamble portion identifies a test to be performed on the echo canceller.

37.   (Canceled)

38.   (Currently amended) A computer readable medium having stored thereon instructions, that, when executed by a computing device, result in:
generating an <u>packetized</u> excitation signal having a preamble portion and a test portion;
<u>transmitting the excitation signal to an echo canceller through a network; and</u>
controlling ~~an~~ <u>the</u> echo canceller responsive to the preamble portion <u>after transmitting</u>;~~ and~~
~~measuring a performance parameter a predetermined time before application of the test portion.~~

39.   (Currently amended) A <u>The</u> computer readable medium <u>of claim 38</u> <u>comprising</u> ~~having stored thereon instructions, that, when executed by a computing device, result in:~~
~~generating an excitation signal having a preamble portion and a test portion;~~

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~~controlling an echo canceller responsive to the preamble portion; and~~

measuring a combined loss a predetermined time before receiving the test portion.

40.   (Previously presented) The computer readable medium of claim 38 including encoding information identifying a type of test in the preamble portion.

41.   (Currently amended) ~~A~~ The computer readable medium of claim 38 comprising ~~having stored thereon instructions, that, when executed by a computing device, result in~~:
    ~~generating an excitation signal having a preamble portion and a test portion;~~
    ~~controlling an echo canceller responsive to the preamble portion; and~~
    encoding information identifying a type of test portion in the preamble portion.

42.   (Previously presented) The computer readable medium of claim 38 including encoding the preamble portion such that it is distinguishable from the test portion.

43.   (Canceled)

44.   (Previously presented) The computer readable medium of claim 45 including:
    inhibiting adaptation in the echo canceller responsive to the preamble portion; and
    clearing a register in the echo canceller responsive to the preamble portion.

45.   (Currently amended) A computer readable medium having stored thereon instructions, that, when executed by a computing device, result in:
    receiving ~~an~~ packetized excitation signal generated external to an echo canceller and transmitted through a network, the excitation signal including a preamble portion and a test portion; and
    decoding the preamble portion, the preamble portion configuring the echo canceller during testing; ~~and~~
    ~~disabling a processor in the echo canceller responsive to the preamble portion~~.

46.   (Previously presented) The computer readable medium of claim 45 including identifying a test to be performed on the echo canceller responsive to the preamble portion.

47.   (Currently amended) ~~A~~ The computer readable medium of claim 45 comprising ~~having stored thereon instructions that, when executed by a computing device, result in~~:

~~receiving an excitation signal including a preamble portion and a test portion;~~

~~decoding the preamble portion, the preamble portion configuring the echo canceller during testing; and~~

identifying a type of test signal responsive to the preamble portion.

48.   (Previously presented) The computer readable medium of claim 45 including differentiating the preamble portion from the test portion.

49.   (Previously presented) The method of claim 5 including taking a performance measurement responsive to the preamble portion.

50.   (Previously presented) The method of claim 5 including encoding instructions in the preamble portion that when executed by the echo canceller result in inhibiting adaptation and clearing a register in the echo canceller.

51.   (Previously presented) The method of claim 5 including encoding a test identifier in the preamble portion.

52.   (Previously presented) The method of claim 5 including encoding the preamble portion in such a way as to be capable of being differentiated from the test portion.

53.   (Previously presented) The method of claim 5 including measuring a combined loss a predetermined time before receiving the test portion.

54.   (Previously presented) The method of claim 9 including disabling a processor in the echo canceller responsive to the preamble portion.

55.   (Previously presented) The method of claim 9 including identifying a type of test signal responsive to the preamble portion.

56.   (Previously presented) The method of claim 11 including:

inhibiting adaptation in the echo canceller responsive to the preamble portion; and

clearing a register in the echo canceller responsive to the preamble portion.

57.   (Previously presented) The method of claim 11 including identifying a test to be performed on the echo canceller responsive to the preamble portion.

58.   (Previously presented) The method of claim 11 including identifying a type of test signal responsive to the preamble portion.

59.   (Previously presented) The method of claim 11 including differentiating the preamble portion from the test portion.

60.   (Previously presented) The method of claim 11 including controlling the echo canceller during testing to within a single sample time of the excitation signal.

61.   (Currently amended) The method of claim 61 11 including controlling the echo canceller during testing to within 125 microseconds.

62.   (Currently amended) The system of claim 23 wherein the decoding means:
      inhibits adaption adaptation in the echo canceller responsive to the preamble portion; and
      clears a register in the echo canceller responsive to the preamble portion.

63.   (Previously presented) The system of claim 23 wherein the decoding means disables a processor in the echo canceller responsive to the preamble portion.

64.   (Currently amended) The system of claim 23 wherein the decoding means controls the echo canceller during testing to within a single sample time of the excitation signal.

65.   (Previously presented) The system of claim 66 wherein the decoding means controls the echo canceller during testing to within 125 microseconds.

66.   (Previously presented) The system of claim 31 including:

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a tail circuit for generating an echo back signal responsive to the test portion of the excitation signal; and

a recorder for recording any received echo signal allowed to pass through the echo canceller.

67.   (Previously presented) The system of claim 31 wherein the preamble portion sets timing associated with performance tests defined in ITU-T G.165 and G.168 standards.

68.   (Previously presented) The system of claim 31 wherein the preamble portion identifies a type of test portion.

69.   (Previously presented) The system of claim 31 wherein the preamble portion identifies a performance test.

70.   (Previously presented) The computer readable medium of claim 38 including measuring a combined loss a predetermined time before receiving the test portion.

71.   (Previously presented) The computer readable medium of claim 39 including encoding information identifying a type of test portion in the preamble portion.

72.   (Previously presented) The computer readable medium of claim 45 including identifying a type of test signal responsive to the preamble portion.

73.   (Previously presented) The computer readable medium of claim 47 including:
inhibiting adaptation in the echo canceller responsive to the preamble portion; and
clearing a register in the echo canceller responsive to the preamble portion.

74.   (Previously presented) The computer readable medium of claim 47 including identifying a test to be performed on the echo canceller responsive to the preamble portion.

75.   (Previously presented) The computer readable medium of claim 47 including differentiating the preamble portion from the test portion.

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76.   (New) The method of claim 3 comprising measuring a combined loss a predetermined time before receiving the test portion.

77.   (New) The system of claim 23 where the decoding means identifies a test type in the test portion.

78.   (New) The system of claim 29 wherein the preamble portion identifies a type of test portion.

79.   (New) The echo canceller of claim 35 wherein the preamble portion identifies the test portion.

80.   (New) The computer readable medium of claim 38 comprising measuring a performance parameter a predetermined time before application of the test portion.

81.   (New) The computer readable medium of claim 45 comprising disabling a processor in the echo canceller responsive to the preamble portion.